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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/530,142	05/19/2006	Marc Seidel	6097P060	9664	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER		
			HOLLOWAY, JASON R		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applic	ation No.	Applicant(s)	Applicant(s)	
		10/53	),142	SEIDEL ET AL.		
		Exami	ner	Art Unit		
		JASON	N HOLLOWAY	3633		
: Period for I	The MAILING DATE of this commu Reply	nication appears on	the cover sheet w	ith the correspondence a	ddress	
A SHOF WHICHI - Extensio after SIX - If NO pe - Failure t Any repl	RTENED STATUTORY PERIOD F EVER IS LONGER, FROM THE M ns of time may be available under the provision (6) MONTHS from the mailing date of this com riod for reply is specified above, the maximum so to reply within the set or extended period for reply or received by the Office later than three months atent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF s of 37 CFR 1.136(a). In n- munication. tatutory period will apply ar y will, by statute, cause the	THIS COMMUNI o event, however, may a nd will expire SIX (6) MON application to become Af	CATION. reply be timely filed NTHS from the mailing date of this BANDONED (35 U.S.C. § 133).		
Status						
2a)⊠ TI 3)⊡ Si	esponsive to communication(s) filn his action is <b>FINAL</b> . Ince this application is in condition to be seed in accordance with the pract	2b)∏ This action i for allowance exc	s non-final. ept for formal mat		e merits is	
Disposition	of Claims					
4a 5)□ Cl 6)⊠ Cl 7)□ Cl	aim(s) 1-12 is/are pending in the ) Of the above claim(s) is/a aim(s) is/are allowed. aim(s) 1-12 is/are rejected. aim(s) is/are objected to. aim(s) are subject to restri	are withdrawn from				
9) <u></u> Th	e specification is objected to by th	ne Examiner.				
Ar Re	e drawing(s) filed on is/are oplicant may not request that any object placement drawing sheet(s) including e oath or declaration is objected to	ection to the drawing( g the correction is red	s) be held in abeyar quired if the drawing	nce. See 37 CFR 1.85(a). I(s) is objected to. See 37 C		
Priority und	der 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice o	f References Cited (PTO-892) f Draftsperson's Patent Drawing Review ( ion Disclosure Statement(s) (PTO/SB/08) o(s)/Mail Date	PTO-948)	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application 		

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## **DETAILED ACTION**

This communication is a Final Action in response to the amendment filed 21 January 2009. Claims 1-9 have been amended. Claims 10-12 have been added, therefore claims 1-12 are currently pending and have been considered below.

# Response to Amendment

The previous claim objections are withdrawn in light of Applicant's amendments.

Accordingly, claims 8 and 9 have been treated on the merits.

The previous 35 U.S.C. 112 rejections are withdrawn in light of Applicant's amendments.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 7, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maliszewski et al. (6,467,233).

Regarding claim 1, Maliszewski et al. teaches a tower having a height ranging between a minimum height and a maximum height (column 2 lines 32-34 teaches a range of height), in particular for a wind energy turbine (abstract teaches wind generator), comprising:

a first conical tower segment (56, figure 2) comprising a steel tube (column 2 lines 15-18 teach steel construction) having a predetermined length (column 2 lines 2-4 teaches the size of the segments are chosen based on the designed tower height),

a second conical tower segment (58, figure 2) comprising a steel tube (column 2 lines 15-18 teach steel construction) having a predetermined length (column 2 lines 2-4 teaches the size of the segments are chosen based on the designed tower height), and and a first <u>variable-length</u> cylindrical tower segment (22, figure 2) comprising a steel tube (column 2 lines 15-18 teach steel construction) having a length <u>that can be varied</u>. (The examiner construes that since Maliszewski discloses towers between 60 and 80 meters are comprised of three sections, the lengths of those sections would need to be variable lengths. For instance, to create a tower with a height of 60 meters, three 20 meter segments would be used, with the three segment lengths adding up to the total length of 60 meters. In order to create an 80 foot tower using three segments, three sections approximately 26.7 meters in length would be used. Since different length tower segments would need to be used to create the towers of Maliszewski, the lengths of the sections would need to be varied, thus, the limitations of the claim as amended are met).

wherein the length of the first cylindrical tower segment (22) is capable of being adapted to the necessary height of the tower between its minimum height and its maximum height.

However, Maliszewski et al. fails to explicitly disclose the first cylindrical tower segment has a length between a predetermined minimum length and a predetermined

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maximum length, the minimum height being the sum of the predetermined lengths of the first and second conical tower segments and the minimum length of the first cylindrical tower segment, and the maximum height being the sum of the predetermined lengths of the first and second conical tower segments and the maximum length of the first cylindrical tower segment.

Maliszewski et al. discloses: "The towers of this invention can range in height from 32 to over 80 meters" (column 2 lines 32-34); parameters for tower segments for towers which are within the range of 50 meters (column 2 lines 35-37); parameters for tower segments which are within the range of 60-80 meters (column 2 lines 23-26); for the conical segments, the lengths are determined based on the design height of the tower (column 2 lines 2-4); and claims 10 and 16 claim the exact number of segments for different design tower heights.

Therefore, it would have been obvious to one of ordinary skill in the art to determine that the different segments of the tower of Maliszewski et al. have maximum and minimum predetermined lengths in order to create towers at the desired height specifications using an exact amount of segment sections. Further, it would have been obvious to one of ordinary skill in the art to use appropriate heights for the tower segments since it has been held that changes in size and/or proportion do not constitute patentable subject matter if the claimed relative dimensions would not perform differently than the prior art device (In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)).

**Regarding claim 2**, as best understood, Maliszewski et al. teaches the first cylindrical tower segment (22) comprises a door opening (21, column 33 lines 36-41).

Regarding claim 3, Maliszewski et al. teaches a second cylindrical tower segment (22, figure 2) comprising a steel tube (column 2 lines 15-18 teach steel construction) having a door opening (21, column 33 lines 36-41) and a length,

However, Maliszewski et al. fails to explicitly disclose the minimum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the minimum length of the first cylindrical tower segment and the length of the second cylindrical tower segment and wherein the maximum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the maximum length of the first cylindrical tower segment and the length of the second cylindrical tower segment.

Maliszewski et al. discloses: "The towers of this invention can range in height from 32 to over 80 meters" (column 2 lines 32-34); parameters for tower segments for towers which are within the range of 50 meters (column 2 lines 35-37); parameters for tower segments which are within the range of 60-80 meters (column 2 lines 23-26); for the conical segments, the lengths are determined based on the design height of the tower (column 2 lines 2-4); and claims 10 and 16 claim the exact number of segments for different design tower heights.

Therefore, it would have been obvious to one of ordinary skill in the art to determine that the different segments of the tower of Maliszewski et al. have maximum and minimum predetermined lengths in order to create towers at the desired height

specifications using an exact amount of segment sections. Further, it would have been obvious to one of ordinary skill in the art to use appropriate heights for the tower segments since it has been held that changes in size and/or proportion do not constitute patentable subject matter if the claimed relative dimensions would not perform differently than the prior art device (In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)).

**Regarding claim 4,** Maliszewski et al. teaches cylindrical (22, 24, 26, 28, etc) and conical (56, 58) tower segments having lengths (as illustrated in figure 2).

However, Maliszewski et al. fails to explicitly disclose the length of the second cylindrical tower segment is selectable between a predetermined minimum length and a predetermined maximum length, wherein the minimum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments and the minimum lengths of the first and second cylindrical tower segments and wherein the maximum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments and the maximum lengths of the first and second cylindrical tower segments.

Maliszewski et al. discloses: "The towers of this invention can range in height from 32 to over 80 meters" (column 2 lines 32-34); parameters for tower segments for towers which are within the range of 50 meters (column 2 lines 35-37); parameters for tower segments which are within the range of 60-80 meters (column 2 lines 23-26); for the conical segments, the lengths are determined based on the design height of the

tower (column 2 lines 2-4); and claims 10 and 16 claim the exact number of segments for different design tower heights.

Therefore, it would have been obvious to one of ordinary skill in the art to determine that the different segments of the tower of Maliszewski et al. have maximum and minimum predetermined lengths in order to create towers at the desired height specifications using an exact amount of segment sections. Further, it would have been obvious to one of ordinary skill in the art to use appropriate heights for the tower segments since it has been held that changes in size and/or proportion do not constitute patentable subject matter if the claimed relative dimensions would not perform differently than the prior art device (In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)).

**Regarding claim 7,** Maliszewski et al. teaches a further tower segment (56, 58) is of a conical configuration (a conical configuration is disclosed in: the abstract; column 1 lines 15-16, 35-40; column 3 lines 30-31; figures 2, 4, 5 and 9).

Regarding claim 10, Maliszewski et al. teaches the further tower segment is of a conical configuration (as illustrated in figure 1, 2 and 9 the further tower segment is conical in shape).

Regarding claim 12, Maliszewski et al. teaches the first cylindrical tower segment (12) and the second cylindrical tower segment (14) each comprise an essential constant wall thickness over their length (the examiner construes from column 1 lines 29-30 and column 2 lines 53-56 that since the outer diameter of the cylinders are identical, the inner diameters are also inherently identical. Further, it is notoriously well

known in the art to construct inner cylinder wall diameters which are identical from one end to the next).

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maliszewski et al. (6,467,233) in view of Hanson (4,272,929).

Regarding claim 5, Maliszewski et al. teaches a tower segment (22) which is reinforced by a concrete foundation (column 2 lines 35-45) comprising a door opening (21) and having a length, and

a connecting element (56) for connecting the first cylindrical tower segment (12) with the further tower segment (14) and having a length (the conical segment 56 is the connecting element between segments 12 and 14, wherein the sub-segments (i.e. 22, 24, 28, 30, etc) are welded to one another, essentially forming a single tower segment),

However, Maliszewski et al. fails to explicitly disclose the minimum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the minimum length of the first cylindrical tower segment and the lengths of the further tower segment and the connecting element and wherein the maximum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the maximum length of the first cylindrical tower segment and the lengths of the further tower segment and the connecting element.

Maliszewski et al. discloses: "The towers of this invention can range in height from 32 to over 80 meters" (column 2 lines 32-34); parameters for tower segments for towers which are within the range of 50 meters (column 2 lines 35-37); parameters for

tower segments which are within the range of 60-80 meters (column 2 lines 23-26); for the conical segments, the lengths are determined based on the design height of the tower (column 2 lines 2-4); and claims 10 and 16 claim the exact number of segments for different design tower heights.

Therefore, it would have been obvious to one of ordinary skill in the art to determine that the different segments of the tower of Maliszewski et al. have maximum and minimum predetermined lengths in order to create towers at the desired height specifications using an exact amount of segment sections. Further, it would have been obvious to one of ordinary skill in the art to use appropriate heights for the tower segments since it has been held that changes in size and/or proportion do not constitute patentable subject matter if the claimed relative dimensions would not perform differently than the prior art device (In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)).

Further, Maliszewski et al. fails to explicitly disclose a lower tower segment comprising reinforced concrete.

Hanson teaches a tower for a wind generator wherein the lower segment of the tower is filled with concrete to give additional support to the tower structure (as disclosed in the abstract; figures 2 and 3).

Therefore, from the teaching of Hanson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to fill the base segment of Maliszewski et al. with concrete as taught by Hanson in order to provide a stronger tower structure with greater resistance to high winds and seismic activity.

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**Regarding claim 6,** the combination of Maliszewski et al. and Hanson teaches cylindrical (22, 24, 26, 28, etc) and conical (56, 58) tower segments having lengths (as illustrated in figure 2).

However, the combination of Maliszewski et al. and Hanson fails to explicitly disclose the length of the further tower segment is selectable between a predetermined minimum length and a predetermined maximum length, wherein the minimum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the minimum length of the first cylindrical tower segment, the minimum length of the further tower segment, and the length of the connecting element, and wherein the maximum height of the tower is the sum of the predetermined lengths of the first and second conical tower segments, the maximum length of the first cylindrical tower segment, the maximum length of the further tower segment, and the length of the connecting element.

Maliszewski et al. discloses: "The towers of this invention can range in height from 32 to over 80 meters" (column 2 lines 32-34); parameters for tower segments for towers which are within the range of 50 meters (column 2 lines 35-37); parameters for tower segments which are within the range of 60-80 meters (column 2 lines 23-26); for the conical segments, the lengths are determined based on the design height of the tower (column 2 lines 2-4); and claims 10 and 16 claim the exact number of segments for different design tower heights.

Therefore, it would have been obvious to one of ordinary skill in the art to determine that the different segments of the tower of Maliszewski et al. have maximum

and minimum predetermined lengths in order to create towers at the desired height specifications using an exact amount of segment sections. Further, it would have been obvious to one of ordinary skill in the art to use appropriate heights for the tower segments since it has been held that changes in size and/or proportion do not constitute patentable subject matter if the claimed relative dimensions would not perform differently than the prior art device (In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)).

4. Claims 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maliszewski et al. (6,467,233) in view of Farber (5,513,477).

Regarding claims 8 and 11, Maliszewski et al. teaches conical sections (56, 58) with varying wall thicknesses depending on need disposed within the tower (column 2 lines 9-22). However, Maliszewski et al. fails to explicitly disclose the conical sections have a wall thickness decreasing towards their upper ends in the installed condition of the tower.

Farber teaches graded structural utility poles which have a wall thickness decreasing towards their upper ends in the installed condition (as illustrated in figures 3, 7, and 8).

Therefore, from the teaching of Farber, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall thicknesses of the conical segments of Maliszewski et al. with the decreasing wall thicknesses as

disclosed in Farber in order to further reduce the material costs of the steel segments since less material would be required.

Regarding claim 9, Maliszewski et al. teaches the first cylindrical tower segment (12) and the second cylindrical tower segment (14) each comprise an essential constant wall thickness over their length (the examiner construes from column 1 lines 29-30 and column 2 lines 53-56 that since the outer diameter of the cylinders are identical, the inner diameters are also inherently identical. Further, it is notoriously well known in the art to construct inner cylinder wall diameters which are identical from one end to the next).

### Response to Arguments

5. Applicant's arguments filed 21 January 2009 have been fully considered but they are not persuasive. As indicated by the Examiner in the rejection for claim 1, Maliszewski does in fact teach variable length tower segments (see claim 1 rejection for further details).

### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JASON HOLLOWAY Examiner Art Unit 3633

JH

/Brian E. Glessner/

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Supervisory Patent Examiner, Art Unit 3633